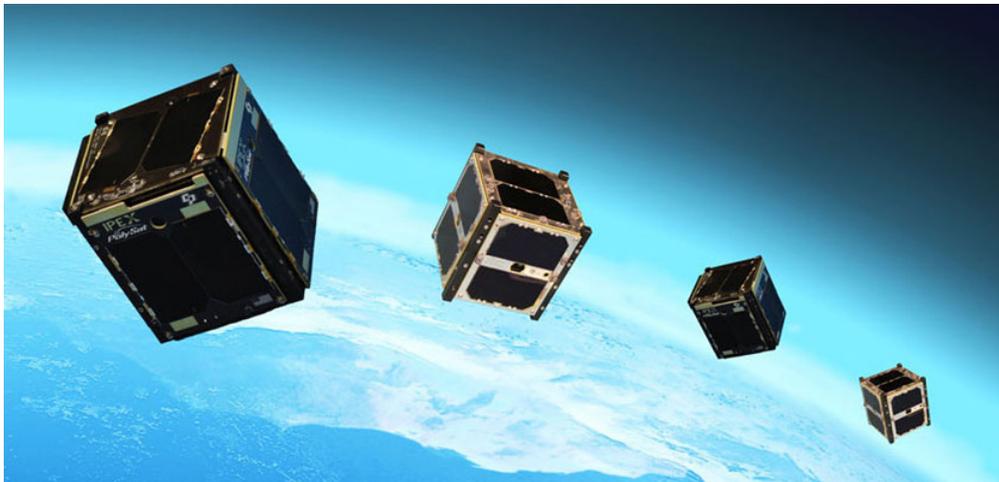


SMALL SATELLITE MISSIONS

As NASA's Earth-to-space bridge that is dedicated to launching all types of spacecraft, the Launch Services Program (LSP) manages small satellite missions, known as CubeSats, which are selected by **NASA's CubeSat Launch Initiative (CSLI)**.

- ◆ CSLI provides access to space for small satellites developed by the NASA Centers and programs, educational institutions and non-profit organizations. This gives CubeSat developers access to a low-cost pathway to conduct research in the areas of science, exploration, technology development, education or operations.
- ◆ By providing a progression of educational opportunities including CSLI for students, teachers, and faculty, NASA assists the nation in attracting and retaining students in STEM disciplines.
- ◆ The CSLI also promotes and develops innovative technology partnerships among NASA, U.S. industry, and other sectors for the benefit of Agency programs and projects. NASA thus gains a mechanism to use CubeSats for low-cost technology development or pathfinders.
- ◆ CubeSats, also called nanosatellites, come in several sizes and are based on the standard CubeSat "unit," measuring 10x10x10cm or 1U (small enough to fit in the palm of your hand). CSLI launches CubeSats as small as 1U and as large as 12U.



- ◆ Due to the small size of CubeSats and the amount of research they can complete once in orbit, NASA can make room for them on the same rockets that take much larger payloads into space. In these instances, the CubeSats are essentially "hitchhiking" to space and are considered secondary payloads to the primary satellites being launched.
- ◆ The Launch Services Program finds these rides to space for CSLI selected CubeSats by manifesting them on NASA, military, or commercial launch vehicles going to the right orbit in the right timeframe. The complement of CSLI CubeSats on a given flight is referred to as an **Educational Launch of Nano-satellite (ELaNa) mission**.



- ◆ Once manifested, LSP works with both the CubeSat developer and the launch service provider to ensure that technical, safety, and regulatory requirements are satisfied before launch.

For more information and videos on NASA's historical and upcoming Small Satellite Missions visit:
nasa.gov/elana and nasa.gov/cubesats